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ORIGINAL ARTICLES

Pneumonectomy: Successful Result in a Case of Bronchiectasis.	Eske Windsberg, M.D.	163
Physical Symptoms from Psychological Sources.	Walter C. Weigner, M.D.	167
Salysrgan: Its Use over an Extended Period of Time to Relieve Cardiac Insufficiency.	Louis I. Kramer, M.D.	175
Physiotherapy and Infections of Hand.	Earl A. Bowen, M.D.	176

Contents continued on page IV advertising section.

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ORIGINAL ARTICLES

PNEUMONECTOMY: SUCCESSFUL RESULT IN A CASE OF BRONCHIECTASIS*

By ESKE WINDSBERG, M.D.

OF PROVIDENCE, R. I.

One would hardly be justified in regarding an isolated instance of successful removal of an entire lung as sufficient to be made the subject of a serious presentation before this society. However, the subject of total pneumonectomy is of tremendous importance especially in its relation to the treatment of early cancer of the lung, and also in its relation to the radical cure of that distressing, benign condition, bronchiectasis, when it involves an entire lung. Efforts to diagnose cancer of the lung early will be greatly stimulated when efficient and relatively safe methods of therapy are developed. Fifteen years ago the diagnosis of primary lung cancer was made rarely outside of the autopsy room. For the treatment of lung cancer we were told ten years ago as medical students at Cornell, to speak nicely to the relatives and call in the undertaker. With the further development of roentgenology, bronchoscopy, and bronchoscopic biopsy, it is now possible to arrive at a fairly early diagnosis. We are challenged now with the task of formulating efficient methods of treatment. In the squamous cell type of bronchogenic cancer, which constitutes 68% of bronchogenic cancers, Clerf and Crawford¹ state that endobronchial removal, including electrocoagulation, has been found useless. Irradiation therapy of primary pulmonary carcinoma, according to Ballon and Carlson,² has up to the present been extremely disappointing. The implantation of radon seeds through the bronchoscope, as described by Tudor Edwards,³ holds some promise for satisfactory results.

Total pneumonectomy must of necessity become one of the effective, if not the most effective, means

at our disposal in the treatment of early lung cancer. This operation will be resorted to more frequently when it is demonstrated that an entire lung can be removed in man with a fair degree of safety. For early cancer of the lung, and for some forms of bronchiectasis, total pneumonectomy will be as important a therapeutic measure as total or subtotal gastrectomy is for early gastric cancer, and radical mastectomy for early breast cancer.

With this broader viewpoint in mind, I humbly proceed to consider briefly the subject of total pneumonectomy and to report in brief an instance of total pneumonectomy which I accomplished successfully in a patient whose entire right lung was the seat of bronchiectasis. A review of the few cases in which the patient has survived pneumonectomy will be given. The technique employed by the several operators will be described.

Macewen⁴ extirpated a tuberculous lung which had become converted into a pus sac. There was hardly anything left of the parenchyma, and no special care of the hilum region was necessary. Inadvertently, it seems, Sauerbruch,⁵ while removing a large ganglioneuroma, ligated the left primary bronchus and the bronchial artery. The entire lung was cast off ten days later. The patient recovered.

In 1931, Nissen,⁶ at Sauerbruch's clinic, in Berlin, extirpated the left lung in a girl of twelve. This may really be considered the first successful pneumonectomy on record; for in Macewen's patient a mere shell of tissue forming the enclosure of a pus cavity was removed, while in Sauerbruch's patient the pneumonectomy apparently constituted an accidental complication. In Nissen's patient cicatricial stenosis of the left primary bronchus developed following a traumatic injury; ultimately bronchiectatic cavitation occurred. Nissen paralyzed the diaphragm. He approached the lung after resecting the third, fourth, and fifth ribs in the axilla. The lower lobe was now freed. Transitory arrest of heart action made it necessary to terminate the operation at this point. Two weeks later, through the same approach, the upper lobe was freed. A rubber tube and silk ligatures were tied about the hilum. The lung was surrounded by tampons on all sides. Two weeks later the necrotic lung was pulled

*Presented before the Rhode Island Medical Society
June 7, 1934.

out together with the hilus ligatures which had been left long. A bronchial fistula was still present eight weeks after operation. Displacement of the mediastinal structures, and of the diaphragm, filled the pleural cavity. Ether anesthesia was employed.

On November 8, 1932, the writer^{7*} completed the removal of the entire right lung in a twelve-year-old girl. The entire lung was the seat of bronchiectatic cavitation, atelectasis, and fibrosis. Prior to the onset of her present illness she was well. In April, 1926, she contracted measles and bronchopneumonia. She was gravely ill at the Chapin Hospital from April 23, 1926, to September 7, 1926. The acute symptoms subsided gradually; but a low grade fever, cough, and expectoration of foul smelling sputum have continued ever since. Since April, 1926, she had been confined to hospital care almost continuously, in seven different institutions, for more than six years. Apparently the bronchopneumonia had resulted in a partial stenosis of the right main bronchus, and subsequently bronchiectatic cavitation became established in the left lung.

The expectoration of fetid sputum was massive in amount; it often reached a maximum of 350 gms. per day. It was difficult to reduce it below 125 gms. daily even with routine postural drainage. On several occasions her sputum contained small amounts of bright red blood. Dyspnea occurred on moderate exertion. While in the hospital, with the aid of postural drainage, she would feel quite well and usually maintain a well-nourished appearance. During the short intervals at home she would lose weight, develop fever of considerable degree, and feel generally ill. During the years of her illness she had a temperature of 99° almost constantly, and 100° occasionally. Smears and guinea-pig inoculations of the sputum were always negative for tuberculosis. The Von-Pirquet test was positive in 1930.

Frequent X-ray studies were made of the lungs since the onset of the illness. Increased density in the shadow of the entire right side of the chest, most marked toward the base, was apparent very early. The density of the shadow at the base was suggestive of fluid, but needling on several occasions did not disclose the presence of fluid. In November, 1927, it was noted that the heart and trachea were displaced to the right; multiple fluid

levels, changing with the shifting of the patient's position, were seen. The deviation of the trachea, heart, and other mediastinal structures to the right became more marked as time progressed.

Bronchoscopy (by Dr. B. Sharp) revealed stenosis of the right main bronchus. An attempt to inject lipiodol into the right bronchial tree failed on four occasions, except for a small amount which entered what appeared to be the beginning of the middle lobe bronchus. Lipiodol visualization of the left lung demonstrated it to be in healthy condition.

Dr. Alex. M. Burgess, who had seen the patient in previous years, was called in consultation. In view of the long standing history, with no evidence of improvement, and with some evidence that the patient's condition was gradually getting worse, it was agreed that some form of radical therapy should be carried out.

The operative removal of the right lung was effected in stages. The cautery method of Graham⁸ and amputation at the hilum were employed. On September 10, 1932, through an axillary approach, the lung tissue was cauterized with a soldering iron, and multiple draining bronchial sinuses were created. On October 3, the cauterization was extended, and more pus pockets were opened. On October 26, the lung was subjected to further cauterization. At this time a small section of lung, which was mobilized from the pericardium by sharp dissection, was excised. On November 8, 1932, using avertin, supplemented with intratracheal nitrous-oxide anesthesia, and with intratracheal suction available, the remainder of the lung was mobilized. The hilum was transfixed and ligated close to the trachea. The lung was now amputated beyond the ligature. The bronchial mucous membrane in the stump of the hilum was treated with the actual cautery. The pulmonary vessels were individually ligated. The pleural cavity devoid of lung was packed with vaselined gauze.

The patient withstood the operative procedures remarkably well. Transfusions of citrated blood were given between stages. In each instance the progress after operation was uneventful. After the third stage the amount of expectoration was definitely reduced for the first time to 60 gms. daily. Following the last operation there were many days during which there was no expectoration, and when there was it never amounted to more than 5 gms. daily. She was now able to discontinue the use of a sputum box which had been a necessity for years.

*A complete description of the technique employed and of the gross pathological findings at operation will be found in a forthcoming publication in *The Journal of Thoracic Surgery*.

The right pleural cavity devoid of lung rapidly became obliterated by a high rise of the diaphragm, an extreme shifting of the mediastinum, and the falling in of the soft parts of the chest wall in the field of operation. The patient was allowed home December 15, 1932. Since then the wound in the chest wall has healed completely except for the opening of a small bronchial fistula high up in the axilla, the size of a pin-head. The fistula has closed, only to open again, on several occasions. Lipiodol injection shows it to be about one and one-half inches in length and to lead directly to the stump of the main bronchus. It is felt that a partial thoracoplasty may be required to effect permanent closure of the fistula, as well as to overcome the extreme deviation of the trachea to the right.

During the past year the patient has gained in weight and in height. She has carried on well under the worst home conditions imaginable. She is able to play with other children. Moderate dyspnea develops only following considerable exertion. Cough and expectoration are insignificant, and due entirely to the presence of the bronchial fistula. Since September, 1933, she has been attending school for the first time in her life.

Haight,^{9*} on November 14, 1932, completed the removal of the left lung in a girl of thirteen. Five weeks following the extraction of teeth a foreign body was removed from her left main bronchus. Suppuration was present in both lungs. Spontaneous, tense, pneumothorax and an acute empyema developed on the left side; these complications were successfully treated by means of air-tight drainage. The right lung cleared. Stenosis of the left main bronchus and bronchiectasis persisted despite all conservative therapy and thoracoplasty. November 8, 1932, under nitrous-oxide anesthesia he removed the fourth, fifth, and sixth ribs (regenerated) posteriorly. The lower lobe was made free. Due to the patient's condition, the wound was now closed and air-tight drainage was established. November 14, 1932, the wound was reopened and the

entire lung was mobilized. Each lobe was ligated separately with double braided silk and rubber tube ligatures. Gauze was placed about the lung because there was oozing from the parietal pleura. The wound was closed and air-tight drainage was again established. Four days later the wound was packed wide open with gauze. On the sixteenth day the upper lobe sloughed off, and on the seventeenth day the lower lobe came away. A fistula occurred from the upper lobe bronchus, but this soon closed spontaneously. On December 28, 1933, the condition of the patient was excellent and she had no sputum.

Graham and Singer,¹¹ on April 5, 1933, using intratracheal anesthesia of nitrous oxide and oxygen, removed the left lung in a man aged forty-eight. A carcinoma was present in the bronchus of the upper lobe which was atelectatic and contained numerous small abscesses. Induced pneumothorax was present about the upper lobe, whereas the lower lobe was adherent. At operation the lower lobe was freed. A small rubber catheter was tied tightly about the hilum. With the electric cautery, the lung was cut off between this ligature and crushing clamps placed distally. The mucous membrane of the bronchial stump was destroyed by cauterization. The hilar stump was now transfixed and tied with a ligature of No. 2 chromic catgut placed distally to the catheter. The catheter was now removed, and in its stead another transfixion tie was placed. The stump of the pulmonary artery was tied separately with catgut. Radon seeds were inserted about the stump. The third to the ninth ribs inclusive were removed posteriorly and laterally. The wound was now closed and air-tight drainage was established. Primary union occurred, but the stump opened, and the patient was expectorating pus which came from the unobliterated upper portion of the pleural cavity. Subsequently the first and second ribs were also resected, and the empyema cavity was drained. The wounds were all solidly healed when the patient left the hospital on June 18, 1933.

Rienhoff¹² has performed two successful pneumonectomies. On July 24, 1933, he removed the left lung in a baby aged three and one-half years. On November 3, 1933, he removed the left lung in a woman twenty-four years of age. In each case the left primary bronchus was the seat of a tumor, in one benign and in the other malignant. The method employed in both cases was almost identical. Preliminary pneumothorax was gradually induced

*Cameron Haight¹⁰ has just had published the report of his case of total removal of the left lung for bronchiectasis. In his masterly article he reviews the literature on experimental pneumonectomy, and analyses the reports of the recorded unsuccessful instances of total pneumonectomy in man. He also makes brief mention of, as yet unpublished, cases of successful pneumonectomy by E. Archibald, J. Alexander, R. H. Overholt, and E. Windsberg. In his article Haight states that the case here reported "is apparently the second instance of successful total pneumonectomy in man. It is also the first successful case of total pneumonectomy in this country."

over a period of two weeks in order to permit the establishment of circulatory and respiratory balance under conditions as comparable as possible to those which may obtain following a pneumonectomy. At operation nitrous-oxide and oxygen anesthesia was used. The lung was approached through an incision in the third intercostal space, anteriorly. Rib spreaders were inserted. The pulmonary vessels were individually ligated. The primary bronchus was then cut across and the lung was removed. To aid in the closure of the bronchial stump, the cartilaginous rings were cut at various points, and the bronchial mucous membrane was carefully sutured with interrupted silk stitches. The thorax was closed tightly and no drainage was employed. Primary union took place in both cases. Each case required three aspirations post-operatively. The pleural cavity devoid of lung was readily filled by expansion of the remaining lung.

Discussion

Of the six cases of successful pneumonectomy, the one here reported involved the right lung; whereas the other five, as well as Sauerbruch's case, involved the left lung. The technique employed by the several operators varied considerably. The technique followed and the results obtained by Reinhoff are really remarkable. The one-stage operation which he carried out is obviously ideal. It requires a patient in whom the parietal and visceral layers of the pleura are not adherent so that preliminary pneumothorax can be instituted. Shennstone and Janes¹³ had already demonstrated the value of pneumothorax as a preliminary to lobectomy. When universal intrapleural adhesions are present, the separation of the lung from the surrounding structures will usually constitute sufficient interference for one sitting; the actual removal of the lung may be effected more safely at a second sitting.

To insure primary healing and to avoid infection Reinhoff emphasizes the importance of minimal injury to the bronchial stump, the avoidance of mass ligatures for the hilum, and the careful approximation of the edges of the bronchial mucosa. He states that intratracheal anesthesia is to be avoided and is not necessary when preliminary pneumothorax has been instituted. However, in the presence of profuse bronchial secretions, as obtains in bronchiectasis, intratracheal anesthesia combined with suction may be a life-saving measure.

The extensive reviews of Whittemore and Balboni,¹⁴ and of Ballon, Singer, and Graham,¹⁵ indicate that pneumothorax, phrenic nerve interruption, and thoracoplasty, in the treatment of well established bronchiectasis of over one year duration, are at best only palliative measures and at times do more harm than good. Simple external drainage of bronchiectatic cavities is also only a palliative means of treatment and has its indications.

When bronchiectasis, not amenable to postural drainage and bronchoscopic therapy, is confined to one lobe of a lung, lobectomy offers a reasonably good prospect for a complete cure. Lobectomy in two stages as practiced by Alexander,¹⁶ or by means of the one-stage method developed by Shennstone and Janes¹³ and perfected by Roberts and Nelson,¹⁷ are relatively safe operations in competent hands. In the average case these methods will undoubtedly supersede the exteriorization operation of Whittemore¹⁸ and the cautery technique of Graham.⁸ The method of Graham not only establishes drainage but also destroys diseased lung tissue in multiple stages. In the case of the patient reported here, the method of Graham was employed to begin with because of the multiple cavities and the extensive involvement. Amputation at the hilus was effected at the fourth sitting when it appeared relatively safe. On the other hand, pneumonectomy as a primary procedure would have been hazardous in this patient.

NOTE: The author is greatly indebted to the late Dr. Harry Lee Barnes, who referred the patient for operation, to Dr. Howard Lilienthal for many helpful suggestions, to Dr. Isaac Gerber, who interpreted the X-rays, and to Dr. Meyer Saklad, who skillfully managed the anesthesia problems.

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PHYSICAL SYMPTOMS FROM PSYCHOLOGICAL SOURCES*

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That psychological distress may give rise to physical symptoms is the common knowledge of every physician. We have all learned from observation and experience that behind such physical complaints as vague, shifting pains and aches, pressure sensations, headaches, dizziness, loss of sleep and appetite, tachycardia, constipation, etc., may lurk an emotional disturbance. Thus, when physical complaints are vague and shifting, when they seem consistent with no organic process, when the patient's general attitude and behavior are of the type popularly branded as "neurotic" or "psychopathic," psychological interpretations of these symptoms are accepted without any hesitancy, and the patient treated accordingly. Unfortunately, there prevails amongst many the impression that physical symptoms arising from psychological sources are grossly different from those arising from organic sources, in that they always tend to be numerous, vague and shifting in character, and associated with certain

tell-tale emotional reactions that are definitely noticeable. Those of us who are in intimate daily contact with mental disease cannot agree entirely with this impression. Our experience has been that, while the physical symptoms in the majority of cases of mild emotional distress tend to be of those general characteristics, they are not necessarily so in all cases. Thus, we have often been confronted in our mental patients by such symptoms as persistent backache, which, for a year or more, had been interpreted as sacro-iliac strain, but which resisted all treatment, only to clear up promptly on relief from a psychological burden. We have seen cases of abdominal pain that had been attributed to chronic appendicitis, etc., but which persisted after operation, only to disappear when psychological distress was uncovered and removed. We have been confronted by problems of nausea and vomiting which had been unsuccessfully treated as gall bladder or stomach disease, but which responded to psychological treatment instead. In many of these cases, nothing "neurotic" or "psychopathic" had been observed by the medical attendant in the case until long after the physical symptoms had appeared. This is an important point and should be carefully noted, since it suggests that physical symptoms may be among the first expressions of emotional disturbance, and that physical symptoms of psychological origin are not necessarily accompanied by noticeable and gross mental aberrations. As a result of observations such as these, we believe that physical symptoms of psychological origin are not necessarily vague, shifting and indefinite in character, but that they may be solitary, persistent and at times distressingly similar to those found with certain types of organic disease.

It is not the purpose of this paper to enter into a discussion of those intricate workings of the mind and personality that make for physical symptoms. It is, instead, to discuss physical symptoms only and to emphasize three things:

1. That physical symptoms of psychological origin are not necessarily numerous, vague, inconstant and shifting in their nature.
2. That physical symptoms of psychological origin may be solitary, persistent and apparently genuinely distressing.
3. That physical symptoms of psychological origin may simulate those ordinarily associated with certain types of organic disease, such as chronic appendicitis, sacro-iliac strain, peptic ulcer, chronic gall bladder disease, neuralgias, etc.

*Read before the Providence Medical Association, March 6th, 1933.

It is also the purpose of this paper to review the difficult problem of differentiating those physical symptoms which are psychological in origin from those which are organic. It is that in which the average practitioner is interested. If persistent, distressing pain in the right lower quadrant, for example, can arise from psychological sources, as well as from chronic appendicitis, the primary interest of the physician is how to differentiate one etiology from the other. What, then, are some of the difficulties that one encounters in evaluating this general problem?

The first great difficulty rests in the physician himself, and is one that he must overcome. He must overcome the unwholesome emphasis upon purely physical concepts of disease that is the natural result of our type of medical education, in which we learn a great deal about the body but practically nothing about the individual. He must catch sight of the fact that the individual is not a body, but is, instead, an embodied mind. He must learn to view his patient not merely as a complex biological machine, but he must also take account of that powerful, motivating current called the mind. He must, by study and observation, develop an appreciation of the role that the mind plays in controlling and qualifying bodily functions. In his intimate contacts with physical symptoms, he must learn to note the association and relationship of psychological distress. If he will do this, he will develop a psychological as well as a physical conception of sickness, and he will sense the mental as well as the physical factors at play in his patient's illness. He will always include in his differential diagnosis of certain types of physical symptoms the possibility of a psychological origin for them.

This whole subject of physical and psychological conceptions is not merely of philosophic value. It has a definite and practical bearing upon the scientific practice of medicine. The physician who entertains physical concepts of disease only tends to evaluate all physical symptoms primarily from an organic point of view. Consequently, those physical symptoms which are merely disguises under which psychological distress masquerades, serve as diagnostic and therapeutic stumbling blocks to him. The importance of a balanced, psychological, as well as physical concept as to the origin and nature of certain physical symptoms is apparent when we consider that the physical disguises of emotional distress may simulate the symptoms that we ordinarily associate with certain organic conditions.

To emphasize the need for a balanced approach to the problem of physical symptoms, let us for a moment portray that which is liable to happen when the approach is according to physical concepts only. When, for example, a patient applies to the physician for relief from some particular symptom, there follows, of course, a search for some organic cause. That is as it should be. The physician does a physical examination; he perhaps invokes the aid of the laboratories for special tests; he avails himself of the X-ray, the electrocardiograph, etc., if their use is indicated. In most cases a definite organic pathology is found, which can be placed into a scientifically honest, causal relationship to the physical symptom. Frequently, however, no such scientifically honest, causal relationship can be found. Frequently the data, as revealed by even the most thorough physical studies, is not conclusive. This is a situation that should immediately prompt the physician to suspect the possibility of a psychological basis for the symptom. Whereas the physician should, at this point, undertake an investigation of his patient's mental life to evaluate the possibility of psychological factors, the physician with physical concepts only will not do this. He will not be able to see beyond his physical concepts and, consequently, he will settle upon some indefinite organic interpretation for his patient's complaint and institute physical treatment—perhaps drastic. He may, of course, be correct in his deductions, but if, perchance, the symptom is from a psychological source, he will be in error. To treat in a physical way those symptoms which are vague and inadequately substantiated by organic findings, without considering possible psychological sources for them, is dangerous. It is very apt to lead to a patient who is neither rid of his complaint, nor satisfied with his physician. It is, of course, obvious at this point that it is just such an approach as this that is responsible for those thousands upon thousands of dissatisfied patients from whom prevailing healing cults extract a nourishing existence, taking millions upon millions of dollars from legitimate medicine. The frequency of physical symptoms of psychological origin makes it impossible for any physician to escape from this difficult problem of differentiation and evaluation. To guard against this danger, the physician should, in every case where the physical symptoms are inadequately or inconclusively substantiated by physical findings, consider in his diagnosis the possibility that psychological factors may be responsible for the symptoms. Unless he

does so, he is very apt to be completely misled by the physical disguise under which psychological distress masquerades. Unknowingly he will attempt physical treatment for what is really a psychological disorder—which is about as successful as trying to run a gasoline engine on steam.

It was previously stated that the practitioner's chief interest in physical symptoms arising from psychological sources, is how to differentiate them from those arising from organic sources. Criteria upon which this differentiation may be made are difficult to establish. There are very few physical symptoms that can be viewed by themselves and branded with certainty as being psychological, rather than organic, in origin. For example, given a patient who complains of and demonstrates a glove type of anesthesia over the hand—a type of disturbance that conforms to no possible neurological lesion—it is possible to view that symptom by itself and to label it as being psychological in origin. Suppose, however, that as a symbolic conversion of a psychological burden, our patient has, instead, such a symptom as pain in the back. There is no possible way to view that symptom by itself and label it with certainty as being psychological in origin. It may possibly be due to a degree of sacro-iliac strain; it may be due to several other physical conditions. It is this particular type of symptom that is difficult to evaluate. If that pain can come from sacro-iliac strain, and if it can also come from psychological sources only, the natural question at this point is, "How can one determine one etiology from the other?" There is, in the last analysis, but one way to evaluate such a symptom, and that is to evaluate the total situation of which that symptom is but a part. If, for example, the patient appears to be of a wholesome personality make-up; if the mode of onset of the symptom was typical of the suspected organic condition; if the clinical features of the pain, disability, etc., were characteristic of the suspected organic condition; and if the process responded normally to treatment, there would be little reason to suspect other than a physical cause. If, on the other hand, the onset was a bit atypical; or if the clinical features of the complaint and disability were not just what one should expect; or if the complaint seemed to be peculiarly resistant to treatment; or if the patient showed evidence of an abnormal and unwholesome personality make-up; or if the patient at the time seemed to be struggling with some difficult situation and in psychological distress; or if the disability seemed to be serving

some comforting purpose in relation to this emotional distress, then, by putting all these factors together as one would the pieces of a jigsaw puzzle, could we get a picture of the total situation and be justified in suspecting a psychological source for the complaint. Then, of course, should follow a careful appraisal of the patient's mental life. By friendly, tactful approaches, those social camouflages that cover the details of psychological distress should be removed, and constructive psychotherapy administered. It must be remembered at this point that, in dealing with a physical symptom arising from a psychological source, we are dealing with an illness that serves as the patient's most satisfactory solution to some emotional problem under which he is laboring. To remove that illness, without constructively helping the patient to face that problem, is an impossibility. Hence, the need of understanding and help from the physician as given to the patient in the form of psychotherapy. In those cases of physical symptoms arising from psychological sources, friendly, helpful words will be of more curative value than any potions, strapings or physiotherapy.

To emphasize the points previously mentioned, it would be desirable to present several cases, showing physical symptoms from psychological sources, the methods of evaluation, treatment, etc. In the limited time allotted to this presentation, however, it is, of course, impossible to describe in detail more than one such case.*The case about to be described was particularly chosen because in it we will see a persistent and distressing abdominal complaint in a young woman who, to casual medical and lay observers, had shown no evidence of any abnormal psychological condition. We will note in the history how her abdominal complaint had been previously evaluated according to physical concepts only. We will see how an operation had been performed according to those concepts, in spite of the fact that organic evidence to account for her complaint had been meagre. We will note that no attempt had been made to evaluate her psychological condition, that her operation brought her no relief, and, lastly, we will see how, as a basis for her physical complaint, was a psychological conflict, which, when alleviated, was followed by complete disappearance of her physical ailment.

The case is that of an American girl, 21 years of age, a second year student nurse. The second day after she arrived at the hospital for her affiliation from a large New England hospital, she complained

of pain in her abdomen, with some nausea. She was, therefore, admitted for observation. The history, as she gave it, was that for about a year she had had periods of abdominal pain, sometimes in the right lower quadrant, sometimes higher, sometimes diffuse throughout her abdomen. She had had nausea, but never vomiting. Because of these attacks, she had been operated upon three months previously and her appendix removed. She had been vacationing at home since. During a week's observation, nothing objective was found to substantiate her assertions of pain and nausea. Her temperature was normal; repeated white counts ranged between 7,000 and 9,000; at no time did she have any spasm of the abdominal muscles; a gastro-intestinal series was normal. Casually she appeared to be a bright, intelligent, wholesome and emotionally stable girl. On finer psychological scrutiny, however, she seemed unperturbed about her illness, about the time she was losing from her work, etc. Instead, she seemed passively content with her lot. Because of this general situation, a record of her previous illnesses and of her recent operation was procured from her hospital. In it, it was stated that she had been admitted to her own hospital infirmary for pain in her abdomen. No mention was made of her temperature or white count at that time. No gastro-intestinal series, apparently, had been done. One concluded from the record that she had shown at that time no objective evidence of her being sick organically. On the second day after her admission, however, she had been operated upon for chronic appendicitis. The pathological report on the appendix was "chronic appendicitis." Thus, the operator must have felt that his diagnosis had been confirmed and his approach to our patient's problem, through physical concepts only, justified. Subsequent events, however, proved otherwise. The fact that she experienced no relief from her pain and nausea after her appendectomy suggests that, if her appendix had been chronically fibrosed, it had nothing to do with her physical symptoms. It also suggests that her so-called "diseased appendix" had been normal for her, just as it is felt by some pathologists that it is normal for all individuals after the age of six. So, we now have our patient operated upon, but still ill with her same physical complaints. Let us now analyze her general life situation to see if we can find some psychological factors that can be placed into causal relationship to these physical complaints.

In the first place, she was an only child—a situation which, in many instances, constitutes a psycho-

logical disease by itself. Her mother had been a nurse and had, from the time that our patient was a child, directed her thoughts toward nursing. In spite of the fact that our patient was of the artistic, aesthetic personality type, she had entered nursing really against her own wishes, but in deference to those of her mother. One year went by without any great difficulties. Then came the abdominal pain and nausea. Our patient went to her mother often, suggesting that she could not go on with nursing; the physical demands of the work, she pointed out, were more than her health could stand. But her mother encouraged her to try a little longer; perhaps she could conquer her physical disability, she said. Our patient was in love; she wanted to marry. A very promising position had been offered to her fiancé if he would get married and go out West, but our patient had one and one-half years more of nursing, which she, with her artistic leanings, tremendously disliked. Her pain grew worse. She finally reported it to the hospital and was promptly operated upon. Immediately subsequent to the operation, our patient noticed remorse and sympathy in her mother's attitude toward her. She capitalized the opportunity and extracted a promise from her that she might give up nursing. Our patient recuperated; she felt fine; she had no pains. She vacationed for three months, enjoying perfect health. Then, suddenly, her mother's attitude changed. She spoke of our patient returning to nursing. She stated that, since the cause of her past illnesses had been removed, she could now probably finish the remainder of her course without any trouble. Under the force of her mother's emotional domination, our patient returned to nursing. The second day after her return, her old nausea and abdominal pain also returned. Throughout the recitation of her story, our patient was anything but calm and steady. Marked emotionalism was in evidence. At times she wept; at others she laughed uncontrollably. In all, she was markedly unstable and upset. So, it is obvious that in our patient's general life set-up was a painful psychological situation. She was temperamentally unsuited for the profession which her mother had emotionally forced her into. She wished to leave it to marry, but she wanted to make the break honorably and without hurting her mother's feelings. Illness, of course, offered her the best way out of her situation. Certainly no one could blame her for being sick, and no one could criticize her leaving nursing if she was unable to carry on because of illness. Removing her appendix did nothing to assuage the

pain of her psychological distress—hence the failure of the operation to rid her of her symptoms. In a sense, they constituted her trump card by which she intended to win psychological peace and contentment. Until she had attained those ends, she could hardly be expected to give them up. Because of the psychological implications of our patient's illness, her superintendent of nurses called her mother into consultation and advised that she give up nursing—ostensibly for physical reasons. To this the mother acquiesced in sympathy for her daughter. Our patient returned home; her pain immediately disappeared. In six months she was married and to date one and one-half years have gone by and there has been no recurrence of her symptoms.

In connection with this case, it is interesting to note a report on one hundred cases operated upon for chronic appendicitis, which appears in the 1932 issue of *General Medicine*. Of these one hundred cases, forty-two reported that they were not satisfied with their operations, and that they still had the same symptoms as before operation. The author does not mention anything concerning the mental condition of that forty-two percent, but such an investigation might be revealing in the light of the case just described. The author concludes from his series that there is no agreement of opinion as to what constitutes the clinical or pathological picture of chronic appendicitis. While he does not wish to be understood as believing that there is no such entity as chronic appendicitis, he does believe it is not nearly as frequent as it is thought to be. He points out that the lack of relief of symptoms of forty-two per cent of cases in his series, and forty per cent of cases usually, who have had appendectomies for chronic appendicitis, is a serious indictment against that diagnosis and treatment.

It would hardly be proper to close a discussion on this subject without at least mentioning the psychological implications of several very common physical conditions, such as constipation, mucous colitis, insomnia and high blood pressure. As we all probably know from personal, as well as from professional experience, the functioning of the gastrointestinal tract is very sensitive to disturbances of the emotional life of the individual. Constipation, or a tendency toward diarrhea, almost invariably accompanied emotional stress and strain. These facts should suggest that the problem of constipation warrants more than the use of cathartic drugs, or special diets. The relationship between mucous

colitis and nervousness is well known, even if not always apparent. Thus, Osler defines mucous colitis as a secretion neurosis of the lower bowel occurring in individuals of a nervous or hysterical make-up. Murray states that an emotional condition is the real basic problem with colitis. Barger states that whatever is the cause of constipation is the cause of colitis. Both these conditions—constipation and resultant colitis—may, of course, be secondary to some other organic pathology, but the powerful role that emotional distress plays in the production of constipation warrants the serious consideration of psychic factors in all such cases.

The relief of habitual insomnia by sedatives or hypnotics is generally unsatisfactory. Practically all patients so afflicted and so treated will attest to the truth of this statement. That habitual insomnia is an expression of psychological tension under which the individual is laboring is not difficult to understand and accept. Hence, the need for a balanced psychological, as well as physical, approach to that problem.

Nephritis and arteriosclerosis are not always accompanied by an elevation of blood pressure. That is the observation of internists. That many individuals without nephritis or arteriosclerosis, or any other tangible physical disease, show hypertension is the common observation of almost every physician. The role of the emotions in regulating blood tension can easily be understood. Hence, the advisability of treating all cases of high blood pressure by a combined physical and psychological approach. An esteemed and honest practitioner in our midst has stated that he treats cases of hypertension as he would a neurosis, with better than usual results.

In closing, it is hoped that the impression has not been made in this discussion that psychological approaches to the physical problems mentioned offer any diagnostic or therapeutic panacea—not at all. Psychological distress related to physical symptoms is often difficult, or even impossible to uncover. In many cases, even if successfully bared, the revelations simply present social difficulties, under which the individual is laboring, that are well nigh impossible to remove, or even materially alter. It is, instead, hoped that the need of a psychological, as well as a physical, approach to the problems of certain physical symptoms has been emphasized in order that our understanding of them may be fuller, more scientific and helpful, and our value to our patients thereby increased.

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EDITORIALS

OUR HOUSE IN ORDER

Much has been said and written of late regarding the status of the medical profession under the social revolution which, believe it or not, is upon us. Largely twaddle, most of these utterances can be summed up in three or four sentences: *The profession is overcrowded. We are doing more and more charity work. We are losing patients to public clinics and to irregular practitioners. What can we do about it?*

Certainly there is nothing novel in the observation that the profession is overcrowded; nor is the medical profession unique in this respect. We venture to assert, however, that elimination of incompetents and undesirables would do away with overcrowding in practically every profession.

It has been suggested that limitation of enrollment in medical schools be instituted to diminish the annual increment of neophytes to our ever-swelling ranks. We doubt if this is much more practical than the crop-reducing program of the A.A.A., which has gone completely haywire in just

one abnormal season. Total ablation of second- and third-rate schools, plus more careful selection of applicants by Class A schools, laying emphasis on personality and adaptability as well as scholastic standing, might be of some help in this direction.

Charity work is and ever has been part and parcel of the physician's task. The poor are always with us and always will be. Why not stop beefing about it and divide it up a bit more: a definite ratio of patients to doctors in any free clinic, increasing the staff to meet any increase in the size of the clinic?

The competition of quacks and irregular practitioners of all denominations is nothing new to us. We must admit, however, that they are more numerous, better organized, and more influential politically than in the past. The objections to these irregulars as a class—the attributes which render their activities a menace to the health of a gullible public—are chiefly these: incompetence, commercialism, and dishonesty. Incompetence may arise from faulty or inadequate training or from mental and physical factors which no amount of training could overcome. In many cases both sets of causes are operative. The mercenary motive seems a deep-rooted and integral element in the present-day struggle for existence. Yet in the supposedly altruistic practice of the healing art it seems strangely incongruous. The particular brand of dishonesty that marks the quack and the irregular applies principally to exorbitant advertising claims, (a job for the Better Business Bureau!) and the treatment of imaginary maladies suggested to the patient by the healer himself.

Before we start heaving boulders at the cultists, we had best examine our own position and inquire if we ourselves are culpable of any of the crimes of which we accuse them. If after strict examination we can say to ourselves in all sincerity that in us there is no hint of incompetence, no taint of commercialism, and no dishonesty or infidelity in our relations with our patients and our colleagues, then our position is sound. If the answers to our self-questioning leave room for doubt on any of these matters, then it is time for us to clean house.

To attempt to legislate quacks out of existence under our present political system is worse than useless. It behooves the true disciples of Aesculapius to prove by their actions their superiority over these false prophets in every branch of the healing art; and to prove it so conclusively that it cannot be

doubted even by the veriest moron. This is no mean assignment. It is worthy of the best that is in us. By the time we have accomplished it a paternalistic government will doubtless be giving every physician a six months annual vacation (with pay), thus neatly solving the problem of overcrowding.

LABORATORY GUIDES IN MEDICAL PRACTICE

Common sense must always be the watchword of the busy practitioner. A great deal has been said, and with good reason, about the tendency of the modern medical man to lean unduly upon the laboratory in the matter of diagnosis and to forget the use of eyes, ears and hands. Yet it must be admitted that without the aid of special tests in the fields especially of bacteriology, chemistry, clinical microscopy and X-ray, we would be back in the dark ages floundering helplessly and relying on clinical guesses, shrewd perhaps, but often wrong. The wise practitioner, too busy to waste time on frills that may make his work seem "scientific" to his patients, knows when laboratory tests are indispensable and conclusive, when they are merely helpful, and when they are superfluous, an added and unjustifiable waste of time and money. He has equipped himself to do some things for himself and is seldom driven to the indefensible practice of sending urine samples to the public laboratories for analysis. He makes it a rule to use the leucocyte count routinely as an aid in studying infections. The triple ideal of Osler, "The library, the laboratory and the nursery; books, balances and bairns," is in his mind. But though he knows that a throat culture or sputum test may be decisive in the diagnosis of diphtheria or pulmonary tuberculosis, he does not ever try to shift the responsibility for solving his clinical problems to the shoulders of the man who, for example, does his blood chemistry and interprets his X-rays or electrocardiograms. In other words, the clinician, if he be worthy of the name, keeps his own hand on the tiller, accepting this or that aid in charting his course, but always realizing that, after all the laboratory reports are in and all the opinions of consultants, if any, have been recorded, it is he and he only who must make the final decision.

IMPORTANT NOTICE

The following letter from the Department of Commerce at Washington, D. C., has been received by the Secretary of the Rhode Island Medical Society.

DEPARTMENT OF COMMERCE

Bureau of Foreign and Domestic Commerce
Washington

June 22, 1934.

Dr. J. W. Leech, Secretary,
Rhode Island Medical Society,
167 Angell Street,
Providence, Rhode Island.

Dear Sir:

In connection with our report to the United States Senate on National Income 1929-1932, we sent out to physicians and surgeons several thousand questionnaires, for anonymous return, and thus collected from every section of the country a fair sample of data on which to estimate total income from practice in the medical profession. Our report was printed as Senate Document 124, and a brief summary is enclosed.

The average net income from practice (tabulated in our report in Table 181 as "per capita income withdrawn") for the years 1929 through 1932 is shown below; it is the result of our survey by questionnaire:

1929.....\$5,602	1931.....\$4,544
1930..... 5,307	1932..... 3,442

We are now preparing a report, for release this fall, of national income in 1933, and while it is not feasible at this time to gather new data by the questionnaire method, a reasonable figure could be arrived at by using the trend of average income furnished by the Medical Association of each State. I shall therefore greatly appreciate an expression of opinion from you as to whether the average income of physicians and surgeons from practice, in your State, tended to show an increase in 1933 over 1932, of a decrease, or no change. The degree of change could be roughly indicated as an approximate percentage.

For your convenience in replying, I am sending this letter to you in duplicate, with the request that you check off your estimate on the diagram given below and return one copy to me as soon as possible, in the enclosed official envelope which requires

no postage. Your reply will, of course, be considered confidential, and your expression of opinion will prove most helpful.

Change in Average Net Income of Physicians and Surgeons from 1932 to 1933

5% 10% 15% 20% 25% No change

Increase

Decrease

Very truly yours,

ROBERT F. MARTIN,
*Senior Economic Analyst,
Division of Economic Research.*

August 11, 1934.

Please reply at once. We hope to complete this work within a month.

In the hope that publication and dissemination of the fact that physicians' incomes have suffered a marked decrease during the depression may have some effect toward stilling the clamor about the high costs of medical care, I urge the members of the Rhode Island Medical Society to send me *anonymously* a statement of the percentage of change in their income of 1933 as compared with that of 1932.

This information, *anonymous* and *confidential*, will be forwarded to the Department of Commerce.

J. W. LEECH, *Sec'y.*

NOTICE

To insure prompt attention, the readers of this JOURNAL are advised: That matters pertaining to advertising, mailing and accounts should be addressed the Business Manager, Dr. C. W. Skelton, 106 Francis Street, Providence, R. I.

Other matters, books for review, notices, manuscript, letters, reports of meetings, and all affairs of literary nature should be addressed to the Editor, Dr. Frederick N. Brown, 309 Olney Street, Providence, R. I.

SALYRGAN: ITS USE OVER AN EXTENDED PERIOD OF TIME TO RELIEVE CARDIAC INSUFFICIENCY

By LOUIS I. KRAMER, M.D.

108 WATERMAN STREET, PROVIDENCE, R. I.

We are all aware of the usefulness of salyrgan to relieve cardiac distress associated with edema. However, because of the irritant effect of mercurials on the kidneys, its prolonged use has been accompanied by some degree of trepidation. Recently instances of its frequent use for extended periods without producing any serious ill effects, have been reported in the literature.

Dixon¹ reports a case under his observation suffering from arterio-sclerotic heart disease, who in twenty months has received at least 150 injections of the drug without demonstrable ill effects. Smith² has used salyrgan in a patient over a period of three years without showing any evidence of renal damage. Wiseman³ has met with similar success. This case report is added to the literature to stimulate further confidence in the use of mercurials as a diuretic to relieve cardiac inefficiency, and to point out, again, its comparative safety.

CASE REPORT: Mrs. A. T., white female, age 52, was admitted to the Charles V. Chapin Hospital, psychopathic department, on May 25, 1932, because she has shown herself at home to be unmanageable and has had delusions of persecution. Her physical status was that of complete cardiac collapse, i.e., marked orthopnea, cyanosis, precordial pain, rapid pulse and edema of the sacrum and lower extremities.

The past history is essentially negative. There is no history of rheumatic fever, or influenza. She was married at the age of 35 and has one child, now, 14 years old. Her husband left her about five years ago and it seems that ever since the time she was deserted by her husband she has been going downhill both mentally and physically. I shall not go into her mental condition, in as much as it has no direct bearing on her heart condition, although as her

physical condition improved she became mentally more co-operative.

Summarizing briefly the positive findings, we have a well developed, obese, middle-aged woman, dyspnoeic, restless, and in acute distress. Fine crepitant rales in both lungs, particularly the bases. The heart is enlarged to the left, and there is a systolic murmur at the apex and heard over entire precordium. Blood pressure 220/150. Ascites and pitting edema of legs present. The laboratory findings are as follows: Urinalysis on many occasions revealed a trace of albumin, rare hyaline cast, few red blood cells and a specific gravity varying from 1012 to 1028, phenolsulphothalein test (5/27/32) first hour 2.5% and second hour 13% or a total of 15.5%, while a repeat phenolsulphothalein test (6/24/32) gave a reading of 16% first hour and 16% second hour, or total of 32%. The blood Wassermann and spinal fluid Wassermann were both negative. The non-protein nitrogen determinations on several occasions varied from 30 mg. per 100 c.c. of blood to 41 mg. An electrocardiogram taken August 25, 1932, was interpreted as left-sided preponderance with arborization block.

The treatment consisted of complete bed rest, Karell diet for two weeks followed by obesity diet with a low protein ratio, and potassium chloride in place of ordinary table salt. Digitalis was not well tolerated. The patient improved rapidly and was discharged from the hospital August 28, 1932, and the following notation was made on the chart. "The patient was critically ill on her admission to the hospital, suffering from cardiac decompensation and showing evidence of an acute exacerbation of a chronic nephritis. Mentally she was irritable and unco-operative, making unreasonable demands on the staff. With treatment her decompensation was relieved and her hypertension benefited. She was placed at first on a Karell and later on an obesity diet and lost approximately 35 pounds. As her physical condition improved, mentally she became more co-operative. Her disposition was better and she adapted herself fairly well to the hospital routine." Her blood pressure on discharge was 170/90. When leaving the hospital she was able to be up and about without too much discomfort. However, soon after she got home she began to do more than she was warned to do, such as climbing stairs, and going to the movies. Her compensation soon broke and it was again, necessary to hospitalize her. And on October 24, 1932, she was admitted to the Rhode

1. Dixon, Ira M., M.D. Salyrgan: Its Long Continued Use in Cardiac Insufficiency with Latent Edema. *New England Journal of Medicine*, April 12, 1934, p. 800-802.

2. Smith, C., M.D. The Use of Salyrgan in a Patient Over a Period of Three Years, for Recurring Ascites and Edema Associated with Cardiac Failure. *Jour. A. M. A.*, Feb. 17, 1934, p. 532.

3. Wiseman, J. R., M.D. Prolonged Use of Salyrgan as a Diuretic: Report of 270 injections in five years in one case. *Jour. A. M. A.*, July 9, 1932, p. 114-115.

Island Hospital in complete decompensation. Bed rest and diet was of no avail. The patient was gradually losing ground. She was edematous from her waist down, and her abdomen was tense with ascites. Her condition became alarming, and in spite of the evidence of kidney damage as shown by urinalysis, I felt that I was justified in attempting radical therapy. I started her on salyrgan. She received her first intravenous injection of this drug on the 19th of November, 1932, and continued at two- and three-day intervals for 10 months and weekly intervals thereafter. At first the salyrgan was preceded by amm. chloride, 90 grains a day. Later this was found unnecessary, in as much as the response was equally effective without the use of ammonium chloride. The output following the first intravenous injection of 1 c.c. of this drug was 5820 c.c. in 24 hours. However, in spite of the continued profuse diuresis the patient did not become edema free, and on the 30th of March, 1933, an abdominal tap yielded 12,360 c.c. of a thick, yellowish fluid, and on June 9, 1933, another abdominal tap yielded 6,720 c.c. of a similar fluid. The salyrgan was continued as before the paracentesis was resorted to. Following this procedure the patient began to improve very rapidly and on the 17th of August, 1933, she left the hospital feeling very comfortable. She continues to receive 1 c.c. of salyrgan at weekly intervals, and the diuresis is as prompt although not as profuse as at the beginning. The average response now varies between 3000 c.c. and 4000 c.c. in 24 hours. To date she received 170 intravenous and 10 intramuscular injections of this drug (1 c.c. doses) without showing any change in her renal efficiency. The blood urea nitrogen June 11, 1934, was 16.77 mg. per 100 c.c. of blood, and urinalysis showed a trace of albumin, rare hyaline cast, no red cells, and a specific gravity of 1029. The blood pressure fluctuates between 190/100 and 175/95.

The patient is fairly comfortable, edema free, and is able to be up and about the greater part of the day. The rales in the chest persist. She is able to look after her own needs, such as preparing her own meals and making her own bed. She undoubtedly owes her comfort and comparative well-being to the therapeutic effect and persistent use of salyrgan. It would seem that the use of this drug, when indicated, is justifiable even in cases with pre-existing renal damage.

PHYSIOTHERAPY AND INFECTIONS OF HAND

By EARL A. BOWEN, M.D.
669 PARK AVENUE, CRANSTON, R. I.

The treatment of infections of the hand may be divided into two parts: 1. Adequate drainage. 2. Restoration of function.

Part one is the province of the surgeon and he should approach his problem with the same seriousness as he does a laparotomy. He must know when to cut, where to cut, and how much to cut in order to prevent the spreading of the infection with its consequent deformities or possibly the death of the patient.

Next, he must not keep up wet dressings too long, resulting in boggy tissues, because if the incisions have been properly made, forty-eight hours of constant moist dressings is sufficient for the majority of cases. Then dry heat in the form of a cradle of electric lamps should be applied three hours daily.

Now for part two. After five days, the infection should be under control and the physiotherapist should be called in. The problem of restoration of function should not be delegated to the nurse because she has neither the training, experience, patience, nor enthusiasm for this kind of work. At this time, the surgeon should remind both physiotherapist and patient that except during manipulation, the hand should always be maintained in the position of function, i.e., like the hand of a baseball player grasping the ball.

All early procedures of passive and active motion should take place in a saturated solution of boric acid at 110° F. gradually working up to a period of thirty minutes. When all incisions are healed the whole arm should be thrust into a whirlpool bath at 110° F. for thirty minutes. This bath loosens up adhesions and should be followed immediately by massage, and passive and active motion for another thirty minutes. This last treatment should be given at least three times a week. In order to sustain the morale of the patient, it is wise to recommend home exercises such as playing tennis, using the typewriter and squeezing a soft rubber ball.

In conclusion, let me emphasize three points:

1. Proper incisions should be made to insure adequate drainage.
2. Constant wet dressings should be discontinued on the third day, and dry heat instituted.
3. The physiotherapist should be called in after five days and if this is done, convalescence will be measured in terms of weeks rather than months.

—Reprinted from *The Physiotherapy Review*
Nov.-Dec. 1933.

SOCIETIES

THE RHODE ISLAND MEDICAL SOCIETY

Dr. Chas. F. Gornly, chairman of the Medical Emergency Relief Committee of the Rhode Island Medical Society, made a verbal report of the activities of his committee. Several meetings of the committee have been held, and preceding this final meeting a conference was held with the Governor and other members of the State Emergency Relief Commission. At this meeting it was urged upon the State Emergency Relief Commission the willingness of organized medical profession to cooperate with the Commission in the furnishing of medical relief to the indigent sick on the State Relief rolls, such medical services to be paid to the physicians from Federal Funds allocated to the State Unemployment Relief Commission.

The following basic policy and procedure based upon regulations No. 7 issued by the Federal Administrator of the Emergency Relief was presented to the State Emergency Relief Commission.

It was voted that the report of the committee be accepted and the committee continued.

"PLAN FOR THE MEDICAL CARE OF PERSONS ON THE EMERGENCY UNEMPLOYMENT RELIEF ROLLS"

The Medical Emergency Relief Committee of the R. I. Medical Society Submits the Following Plan for the Medical Care of Persons on the Emergency Unemployment Relief Rolls

The R. I. Medical Society recognizes and appreciates the necessity for the intervention of the Federal Government in giving Medical Relief to the distressed and sick on the Unemployment Relief Rolls. For this purpose the Federal Emergency Relief Administration makes available funds that can be used under certain specified conditions defined in Rules and Regulations No. 7. (These rules and regulations are set out in detail in the *Journal of the A.M.A.* of September 23, 1933.)

That these benefits may accrue both to the unemployed sick and to the family doctor who has in a great many cases given medical services without hope of remuneration, we offer this plan.

Policy

The basis of the policy is an agreement between the State Relief Administration and the organized

medical profession to recognize the traditional family-physician relationship and an agreement by the physicians to furnish the same type of service to an indigent person as would be rendered to a private patient. That such service shall be a minimum, consistent with good professional judgment and shall be charged for at an agreed rate.

Procedure

A uniform procedure for medical care in the home shall be established by each local relief administration as follows:

(1) All authorizations for medical care shall be issued in writing by the local relief officer prior to the giving such care except that telephone authorizations shall immediately be followed by such a written order.

(2) Acute Illness—Authorizations for the medical care of acute illness shall be limited to a definite period and a maximum number of visits. Medical care in excess of this can only be authorized following investigation by the local relief officer.

(3) Chronic Illness—Medical care for prolonged illness shall be authorized on an individual basis and visits shall be limited in frequency by agreement.

(4) Obstetric Care—Authorization for obstetric cases in the home shall include an agreed number of prenatal visits, delivery in the home and proper post-natal care.

(5) Fee Schedule—The fee schedule shall be determined by agreement between the local relief administration and the local organized profession. All fee schedules shall be established on a basis of an appreciable reduction from the prevailing minimum charges in the given locality.

Authority

All agreements between local relief administration and the local medical profession must have the approval of the State Emergency Relief Administration.

Local relief administration shall request the president of the local district medical society to appoint a committee to advise them in the formation and adoption of these agreements and to assist them in maintaining proper professional standards and in deciding questions of policy and practice.

Participation in this work shall be open to all physicians licensed to practice medicine in this state

who shall be willing to accept the regulations and provisions of this program.

The local relief administration and the local medical advisory committee in forming an agreement shall give due attention to the details of "Rules and Regulations No. 7 of the Federal Relief Administration."

The Medical Emergency Relief Committee of the R. I. State Medical Society shall act in an advisory capacity with the State Unemployment Relief Administration.

J. W. LEECH, M.D., *Sec'y*

The regular quarterly meeting of the Rhode Island Medical Society was held September 6, 1934, at the Emma Pendleton Bradley Home, East Providence, R. I., at the invitation of the Board of Trustees and Staff of that institution.

From 3 o'clock until 4 o'clock the Home was open for inspection, giving the members of the society an opportunity to see some of the activities of the institution.

At 4 o'clock the meeting was called to order by the President, Dr. A. H. Miller, who referred to the publication of "Papers of Charles V. Chapin, M.D.," by the Commonwealth Fund. This volume comprises all the published writings of Dr. Chapin, who served the City of Providence for so many years as Superintendent of Health, and Registrar of Vital Statistics, and as a past president of this society.

The President appointed to the Committee on the Board of Classification Dr. E. V. Murphy, Newport, and Dr. Peter P. Chase, Providence.

The following program was presented:

1. "Report of the 1934 Sessions of the American Medical Association," Guy W. Wells, Delegate to the A.M.A.

2. "Function of a Hospital for Children with Nervous Diseases," Arthur H. Ruggles, Superintendent and Chief of Staff of the Emma Pendleton Bradley Home.

3. "Some Nervous and Mental Problems of Childhood; Illustrative Case Report," Charles Bradley, Medical Director of the Emma Pendleton Bradley Home.

Discussion by Drs. Corson and Langdon.

4. "Paraldehyde and Other Hypnotics: Recent Developments," George A. Elliott, Connecticut State Hospital, Middletown, Conn.

Discussion by Drs. Munro, Ekstein, Ruggles, Hughes and Messenger.

An expression of thanks and appreciation to the Staff and Board of Trustees of the Emma Pendleton Bradley Home for their kindness and courteous invitation to hold this meeting at Bradley Home was voted.

Following the meeting a collation was served.

J. W. LEECH, M.D., *Sec'y*

NOTE

The first International Assembly of the Interstate Post Graduate Medical Association of North America to be held east of the Alleghenies is to take place in the public auditorium of Philadelphia, Pennsylvania, November 5th, 6th, 7th, 8th and 9th, 1934, with pre-Assembly clinics on November 3rd, and post-assembly clinics on November 10th in the Philadelphia hospitals.

The public auditorium is located in the University area and across the street from the Philadelphia General Hospital, thus assuring the Assembly close access to an abundance of clinical material.

The aim of the program committee with Dr. George W. Crile as chairman, is to provide for the medical profession of North America an intensive post-graduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions.

The Philadelphia County Medical Society will be host to the Assembly and has arranged an excellent list of committees that will function throughout the Assembly. A most hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present and enjoy the hospitality of Philadelphia, "The City of Brotherly Love." A list of distinguished teachers and clinicians who are taking part on the program will be found on page IX of the advertising section of this JOURNAL.

Special reduced railroad rates will be in effect on all lines.